

AMENDMENTS TO THE CLAIMS

Please amend the claims of this application as follows:

1. (Currently amended) An electrophoretic display unit (1) comprising
an electrophoretic display panel (50) comprising a plurality of pixels (11)
each coupled to a pixel electrode (5), the plurality of pixels being arranged in a plurality
of rows and columns;
data driving circuitry (30) for supplying a data pulse (D_1 , D_2 , D_3 , D_4 , D_5 , D_6) to each of the pixel electrodes (5) via a switching element associated with each pixel
electrode;
a common electrode (6) coupled to the plurality of pixels (11) for receiving an alternating
voltage signal (V_6); and
a controller (20) for controlling the data driving circuitry (30) for
supplying a setting signal (S_1 , S_2) to each of the pixel electrodes (5) for reducing a
voltage across the associated pixel (11) before a transition of the alternating voltage
signal (V_6),
wherein the data pulse (D_1 , D_2 , D_3 , D_4 , D_5 , D_6) is supplied during a driving
frame period (F_d) during which each row of pixels (11) is selected in turn; and
the setting signal (S_1 , S_2) is supplied during a setting frame period (F_s), the
alternating voltage signal (V_6) being reversed in polarity having the transition after
each the setting frame period (F_s).
2. (Original) An electrophoretic display unit (1) as defined in claim 1, wherein the
switching element comprises a transistor (12), having a gate, source and drain, the data
driving circuitry (30) being coupled to the source via a data electrode (32) the selection
driving circuitry (40) being coupled to the gate via a selection electrode (42), and the
pixel electrode (5) being coupled to the drain.
3. (Cancelled).

4. (Previously presented) An electrophoretic display unit (1) as defined in claim 1, wherein the data pulse (D_1 , D_2 , D_3 , D_4 , D_5 , D_6) is supplied during more than one consecutive driving frame period (F_d).

5. (Previously presented) An electrophoretic display unit (1) as defined in claim 1, wherein the setting frame period (F_s) is shorter than the driving frame period (F_d).

6.. (Previously presented) An electrophoretic display unit (1) as defined in claim 1, wherein the alternating voltage signal (V_6) and the setting signal (S_1 , S_2) have equal polarities during the setting frame period (F_s).

7.. (Previously presented) An electrophoretic display unit (1) as defined in claim 1, wherein the amplitude of the alternating voltage signal (V_6) and the amplitude of the setting signal (S_1 , S_2) are substantially equal to each other during the setting frame period (F_s).

8.. (Previously presented) An electrophoretic display unit (1) as defined in claim 1, wherein the controller (20) is adapted to control the data driving circuitry (30) to provide any one or more of:

- shaking data pulses;
 - one or more reset data pulses; and
 - one or more driving data pulses;
- to each pixel (11).

9.. (Original) A display device comprising an electrophoretic display unit (1) as defined in claim 1; and a storage medium for storing information to be displayed.

10. (Currently amended) A method of driving an electrophoretic display unit (1) comprising an electrophoretic display panel (50), which comprises a plurality of pixels (11) each coupled to a pixel electrode (5), the plurality of pixels being arranged in a plurality of rows and columns, which method comprises the steps of

during a driving frame period (F_d) during which each row of pixels (11) is selected in turn, supplying a data pulse (D_1 , D_2 , D_3 , D_4 , D_5 , D_6) to each of the pixel electrodes (5);

supplying an alternating voltage signal (V_6) to a common electrode (6) coupled to the plurality of pixels (11) and

controlling data driving circuitry (30) for supplying, during a setting frame period (F_s), a setting signal (S_1 , S_2) to each of the pixel electrodes (5) for reducing a voltage across the associated pixel (11) before a ~~reversal of polarity transition~~ of the alternating voltage signal (V_6) occurring after ~~each~~ the setting frame period (F_s).

11. (Cancelled).